June 24, 1999

Mr. Oliver D. Kingsley
President, Nuclear Generation Group
Commonwealth Edison Company
ATTN: Regulatory Services
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: QUAD CITIES MANAGEMENT MEETING SUMMARY

Dear Mr. Kingsley:

The NRC staff met with Commonwealth Edison and Quad Cities Nuclear Power Station management on June 8, 1999. This management meeting was held at the Quad Cities Station and was open to public observation. Enclosure 1 contains the associated meeting summary. Enclosure 2 contains the handout used by the NRC during the meeting. Enclosure 3 contains the handout provided by Commonwealth Edison during the meeting.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC's Public Document Room.

Sincerely,

/s/ M. A. Ring

Mark A. Ring, Chief
Reactor Projects Branch 1

Docket Nos. 50-254; 50-265
License Nos. DPR-29; DPR-30

Enclosures: 1. Meeting Summary
2. NRC Meeting Handout
3. ComEd Meeting Handout

See Attached Distribution

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C. Crane, BWR Vice President
R. Krich, Vice President, Regulatory Services
DCD - Licensing
J. Dimmette, Jr., Site Vice President
G. Barnes, Quad Cities Station Manager
C. Peterson, Regulatory Affairs Manager
M. Aguilar, Assistant Attorney General
State Liaison Officer, State of Illinois
State Liaison Officer, State of Iowa
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Enclosure 1
Public Meeting Summary
Management Meeting for Quad Cities Nuclear Power Station

June 8 Management Meeting

Summary:

The management meeting was conducted in two parts, with the first part focused on the NRC's review of plant performance. NRC representatives discussed the NRC's Plant Performance Review (PPR) for the Quad Cities Station which covered the period from April 1, 1998 through January 31, 1999, and was issued on March 26, 1999. Overall performance at Quad Cities during this period was considered acceptable. Performance in the functional areas of operations and maintenance was described as improved, while performance was viewed as consistent in both the engineering and plant support functional areas. NRC representatives also briefly discussed the background for the PPR process and the NRC's new inspection and assessment program. It was noted that Quad Cities has been selected as a pilot for the new inspection and assessment program which began June 1, 1999.

The NRC presented information contained in the handout in Enclosure 2 during the meeting.

In the second part of the meeting, Commonwealth Edison presented a review of overall and recent performance at the Quad Cities Station, focusing on current issues and both problems and successes. Recent plant events such as the Unit 1 scram on May 21, 1999, were discussed in some detail. Actions being taken to improve performance in previously problematic areas, including material condition and human performance, were described by various Quad Cities managers. Substantial improvement was noted in several areas including backlog reduction, challenges to operators, reduced out-of-service errors, and overall material condition. ComEd also acknowledged instances of difficulty such as a wrong unit error, incorrect installation of test equipment, and missing actions that could have prevented the Unit 1 scram on May 21, 1999. Actions being taken by the station to meet challenging goals in radiation protection and the state of station self-assessment efforts were also described.

The licensee presented information contained in the applicable handout in Enclosure 3 during the meeting.

Partial List of Attendees:

NRC

J. Caldwell, Deputy Regional Administrator, Region III
S. Reynolds, Deputy Director, Division of Reactor Safety, RIII
R. Pulsifer, Project Manager, NRR
M. Branch, Inspection Program Branch, NRR
A. Madison, Inspection Program Branch, NRR
M. Ring, Chief, Branch 1, DRP, RIII
C. Miller, Senior Resident Inspector, Quad Cities
J. Strasma, Office of Public Affairs, RIII
K. Walton, Resident Inspector, Quad Cities
L. Collins, Resident Inspector, Quad Cities

Commonwealth Edison

O. Kingsley, President Nuclear Generation Group
D. Helwig, Senior Vice President
C. Crane, BWR Vice President
J. Dimmette, Site Vice-President, Quad Cities
R. Krich, Vice President, Regulatory Services
G. Barnes, Quad Cities Station Manager
R. Svalesan, Shift Operations Supervisor
R. Freeman Maintenance Manager
D. Wozniak, Engineering Manager
E. Anderson, Radiation Protection Superintendent
R. Chrzanowski, Nuclear Oversight

Enclosure 2

NRC MANAGEMENT MEETING HANDOUT

PLANT PERFORMANCE REVIEW

QUAD CITIES NUCLEAR PLANT

April 1, 1998 - January 31, 1999

Public Meeting
June 8, 1999

PLANT PERFORMANCE REVIEW BACKGROUND

1. Commission directed suspension of the Systematic Assessment of Licensee Performance (SALP) - Last Quad SALP issued 1/30/98

2. New inspection and assessment process scheduled for all plants by January 1, 2000

3. Two pilot plants selected in each region (Quad Cities and Prairie Island) - started 6/1/99

4. Plant Performance Reviews:

   Interim assessment vehicle

   Previously assessed shorter period, used for inspection planning

   Do not provide SALP grades

   Next PPR letters expected in about 1 year

PLANT PERFORMANCE REVIEW
QUAD CITIES

Overall performance acceptable

- Reactor operations were conducted well.
- Both units incurred scrams within 10 hours of each other on June 27 and 28, 1998. Unit 1 also scrammed on September 30, 1998.
- Response to transients was good. Unit startups were performed well with good communications and attention to operator activities.
- Areas of weakness continued to be configuration control, equipment failures, and out-of-service.
- A ComEd record 28 day refueling outage was successfully completed on Unit 1 in December 1998.

PLANT PERFORMANCE REVIEW
QUAD CITIES

Operations area performance improved

- Operators, equipment, and plant personnel responded well to a large number of challenges.
- Operator errors (primarily configuration control) continued at a relatively high rate.
- Execution of the surveillance test program improved with no missed surveillance tests since February 1998.
- Coordination of major evolutions improved as evidenced by the 28 day Unit 1 refueling outage.
- Weak areas included the high number of operational challenges due to deficient equipment and personnel errors.

PLANT PERFORMANCE REVIEW
QUAD CITIES

Maintenance area performance was improving

- Numerous equipment problems resulted in challenges to operators and system operations.
- Weak application of vendor manual information contributed to problems with the scram discharge volume level instruments and the feedwater regulating valve hydraulic controller.
- The quality of maintenance activities resulted in an increased radiation dose to workers and contributed to a low work completion rate.
- The maintenance backlog was successfully reduced from over 1000 items to less than 500 at year end.
- A restructured outage organization, teamwork and communications resulted in the successful completion of a record refueling outage.
- Corrective actions improved in the areas of surveillance tests, implementation of the Maintenance Rule, and addressing past problems.

PLANT PERFORMANCE REVIEW
QUAD CITIES

Engineering area performance was consistent

- Following restart of both units in May 1998, a better understanding of plant capabilities and cable routing resulted in substantial improvement and a significant decrease in the plant risk due to fire.

- Implementation of the modification and 10 CFR 50.59 processes demonstrated improvement.

- The program for identifying, resolving and preventing problems had become more effective.

- Problems were identified in the areas of test control, demonstration of system performance, design control, and corrective action for the residual heat removal system.

- Instances of weak treatment of emergency diesel generator start failures and qualification of commercial grade relays were identified.

PLANT PERFORMANCE REVIEW
QUAD CITIES

Plant support area performance was consistent

- Overall radiation protection and chemistry programs were effectively implemented.
- ALARA planning and radiological work controls were good for outage and non-outage activities.
- The emergency preparedness program was maintained operationally ready with an effective 1998 exercise.
- Security force performance and equipment were generally effective with some problems identified in vital area barriers and response capability.

Enclosure 3

COMMONWEALTH EDISON
Management Meeting Handout

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Quad Cities Nuclear Power Station

NRC Management Meeting

June 8, 1999

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Meeting Agenda

❐ NRC - Overview of PPR	Mark Ring
❐ Plant Performance Review	George Barnes
❐ Material Condition	Dave Wozniak
❐ Human Performance	George Barnes
❐ Functional Area Review	
❖ Operations	Bob Svaleson
❖ Maintenance/Work Control	Russ Freeman
❖ Engineering	Dave Wozniak
❖ Plant Support	Ellen Anderson
❖ Nuclear Oversight	Ron Chrzanowski
❐ Closing Remarks	Joel Dimmette

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Plant Performance Review

George Barnes

Station Manager

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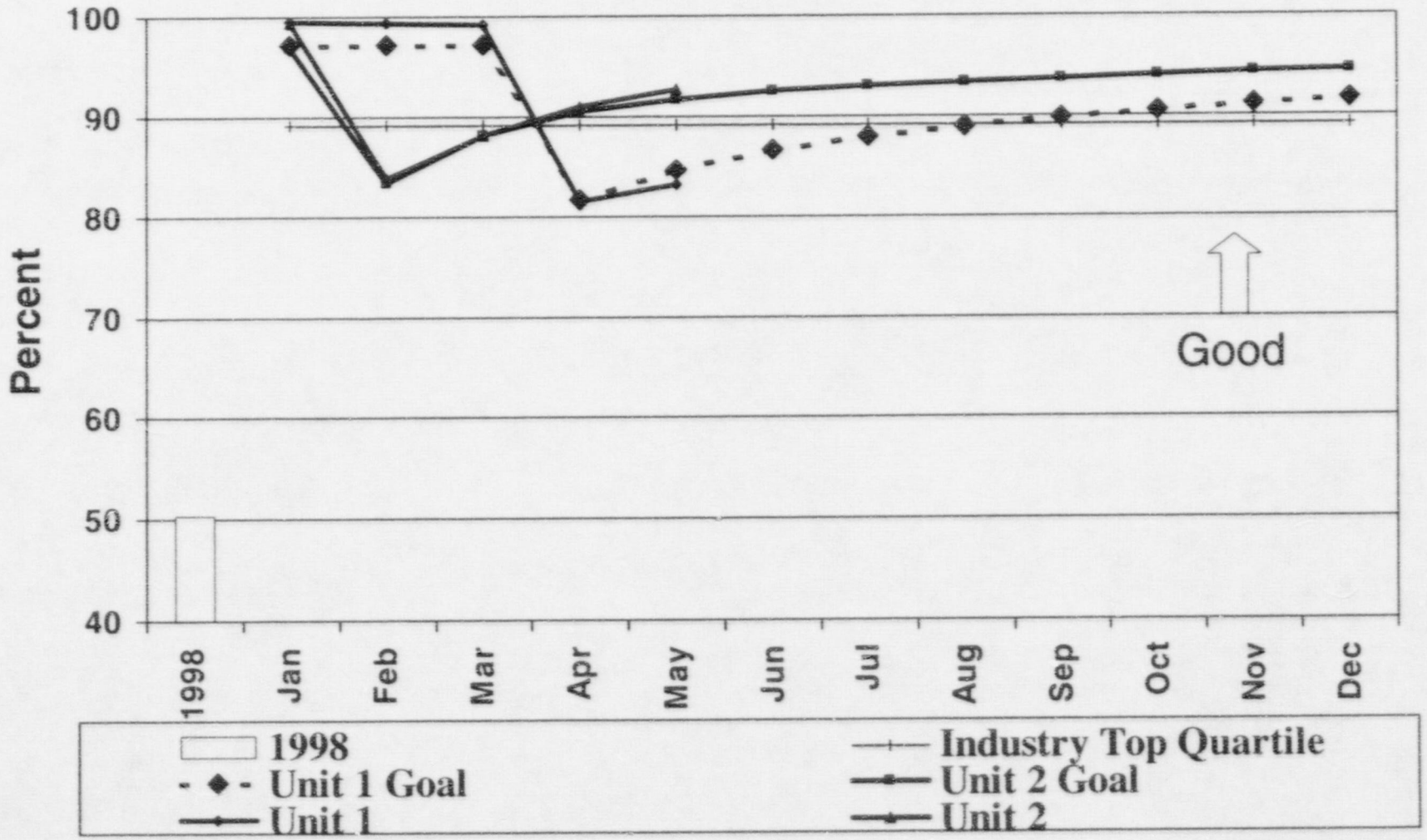
Capacity Factor



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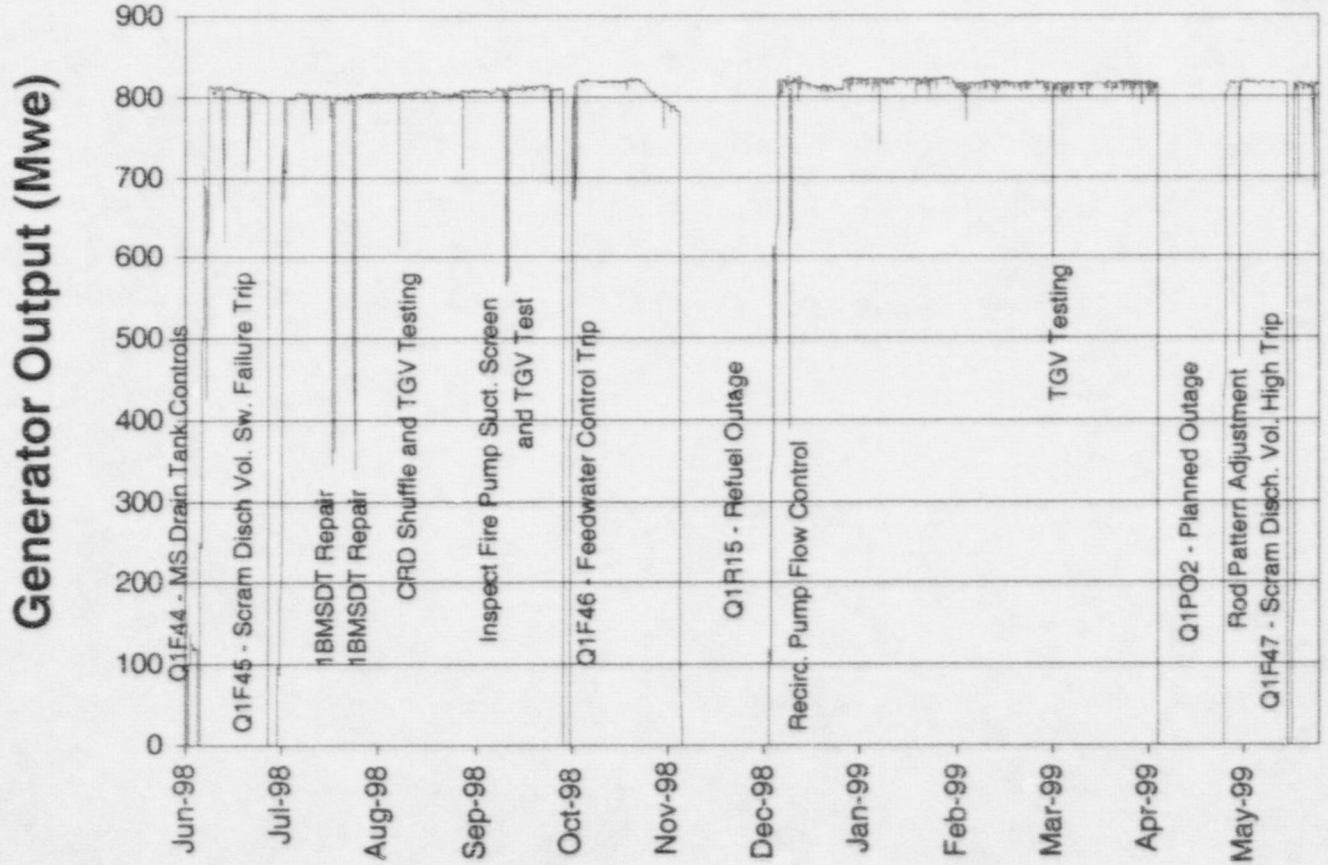
Power History Curve - Unit 1



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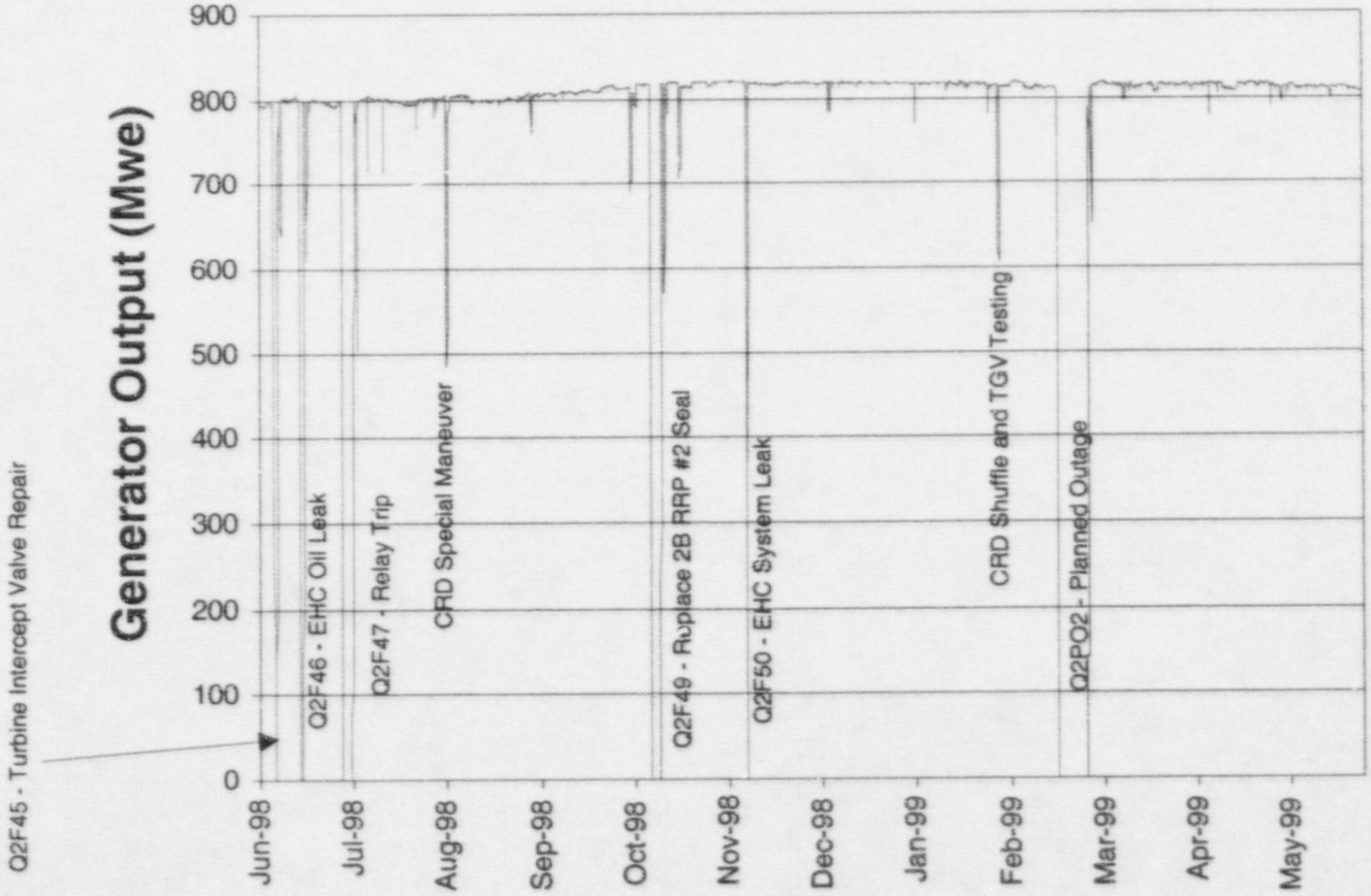
Power History Curve - Unit 2



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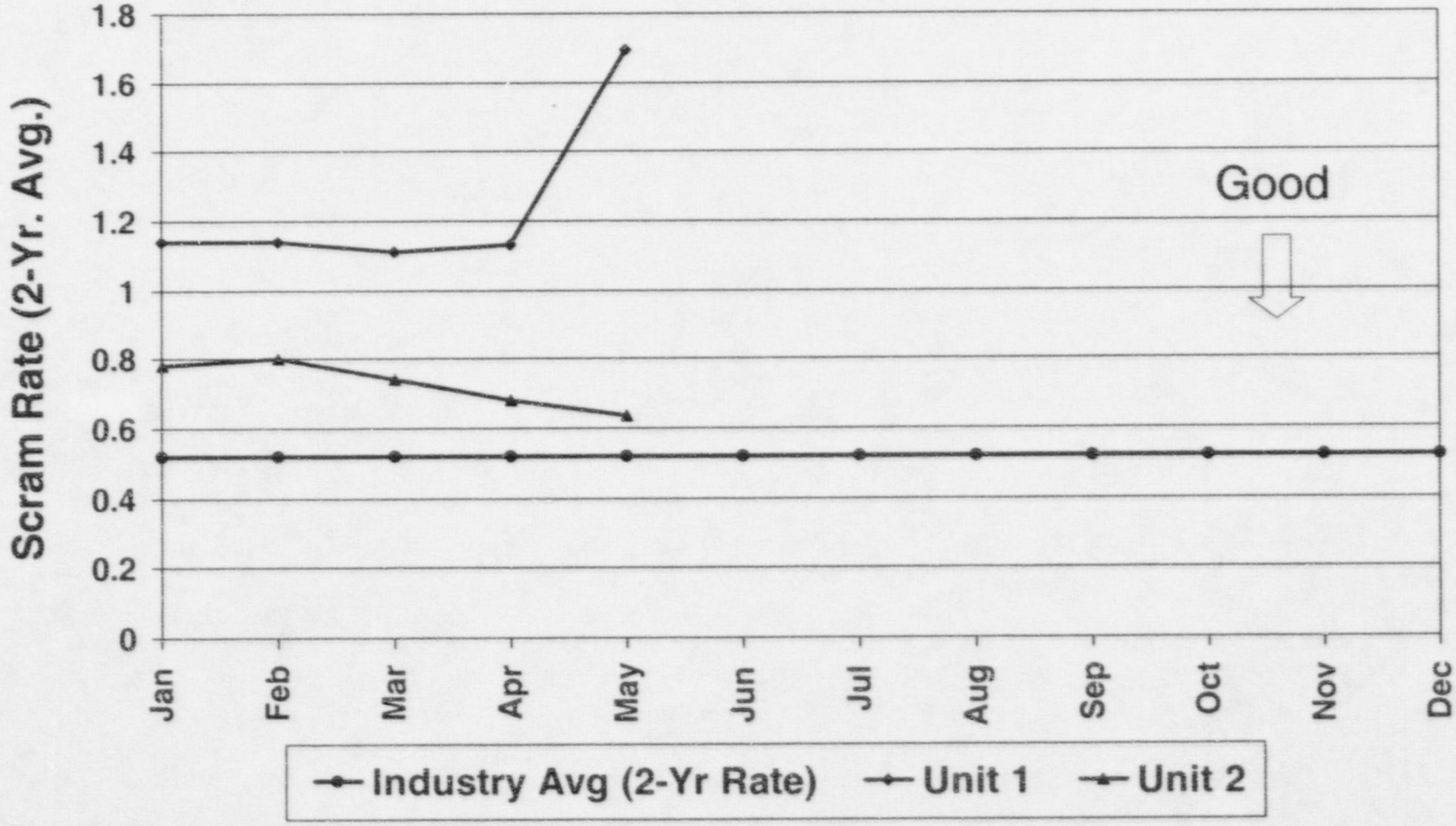
Automatic Scrams per 7000 Critical Hours



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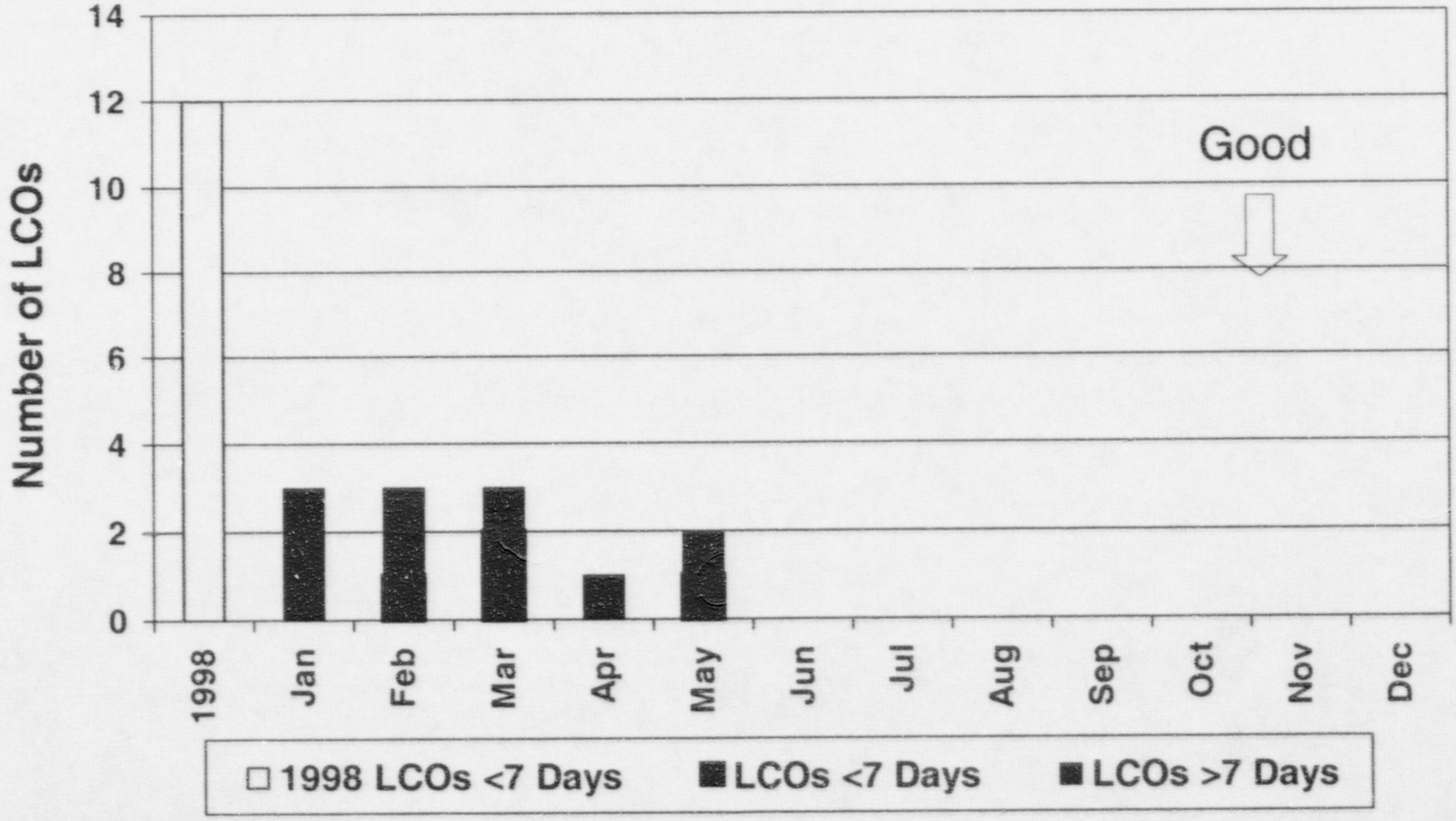
Unplanned LCO Entries



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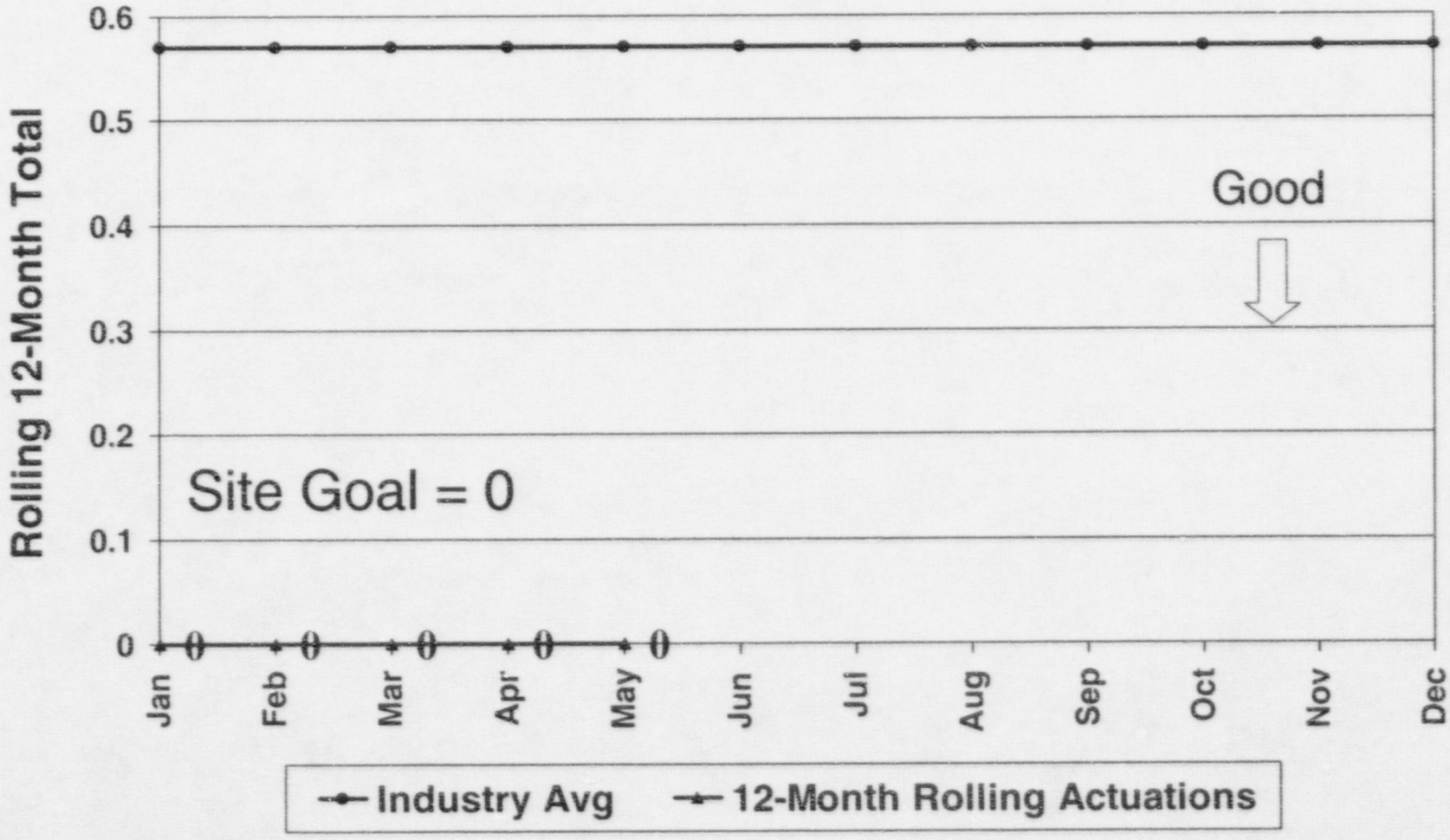
Safety System Actuations



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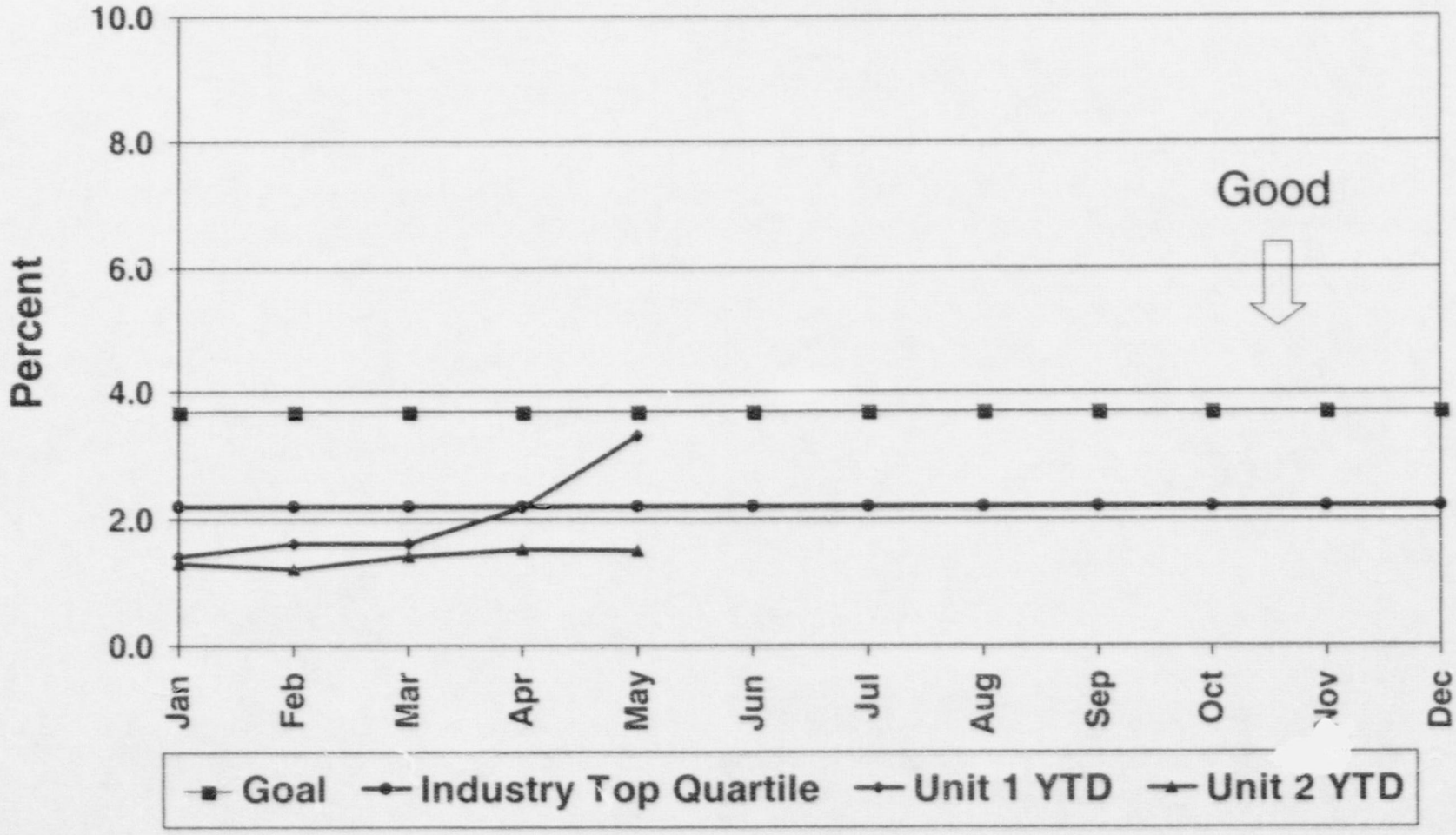
Unplanned Capability Loss Factor



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May 21 Scram

- Scram Was Preventable
  - Engineering - OPEX Reviews
  - Operations - Return To Service Practices
  - Event Screening Committee/Corrective Action Program - Missed Opportunities
- Root Cause
  - Procedure Inadequacy Given System Design
- Corrective Actions - Far Reaching

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Material Condition

Dave Wozniak

Site Engineering Manager

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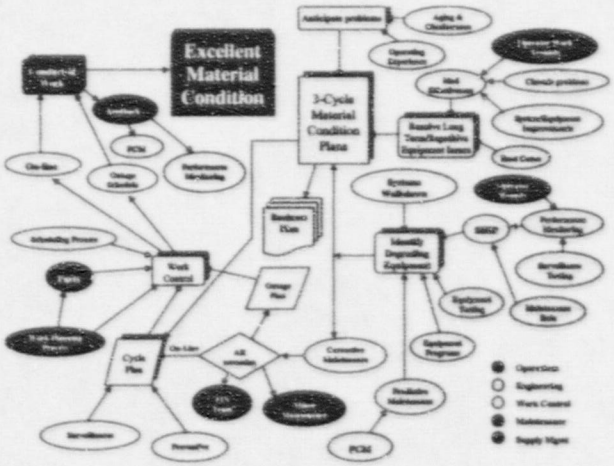
Material Condition Template

Processes



Outcomes

- Capacity Factor
- Power History Curves
- Automatic Scrams
- Unplanned LCO Entry
- Safety System Actuations
- Unplanned Capability Loss Factor

Top Level Indicators

- Corrective Maintenance Backlog
- System Health Windows
- Maintenance Rule (a)(1) Systems

Long Term Plans

- Business Plan
- 3 - Cycle Material Condition Plans

Supporting Indicators

- System Window Performance
- Temporary Modifications
- Equipment Failures
- Leaks and Repairs
- Percent Rework
- Red / Yellow Action Plans
- Control Room Lit Annunciators
- Main Control Room Distractions
- Preventive Maintenance Status
- Number of PM /CM Tasks Closed
- Operator Work Arounds

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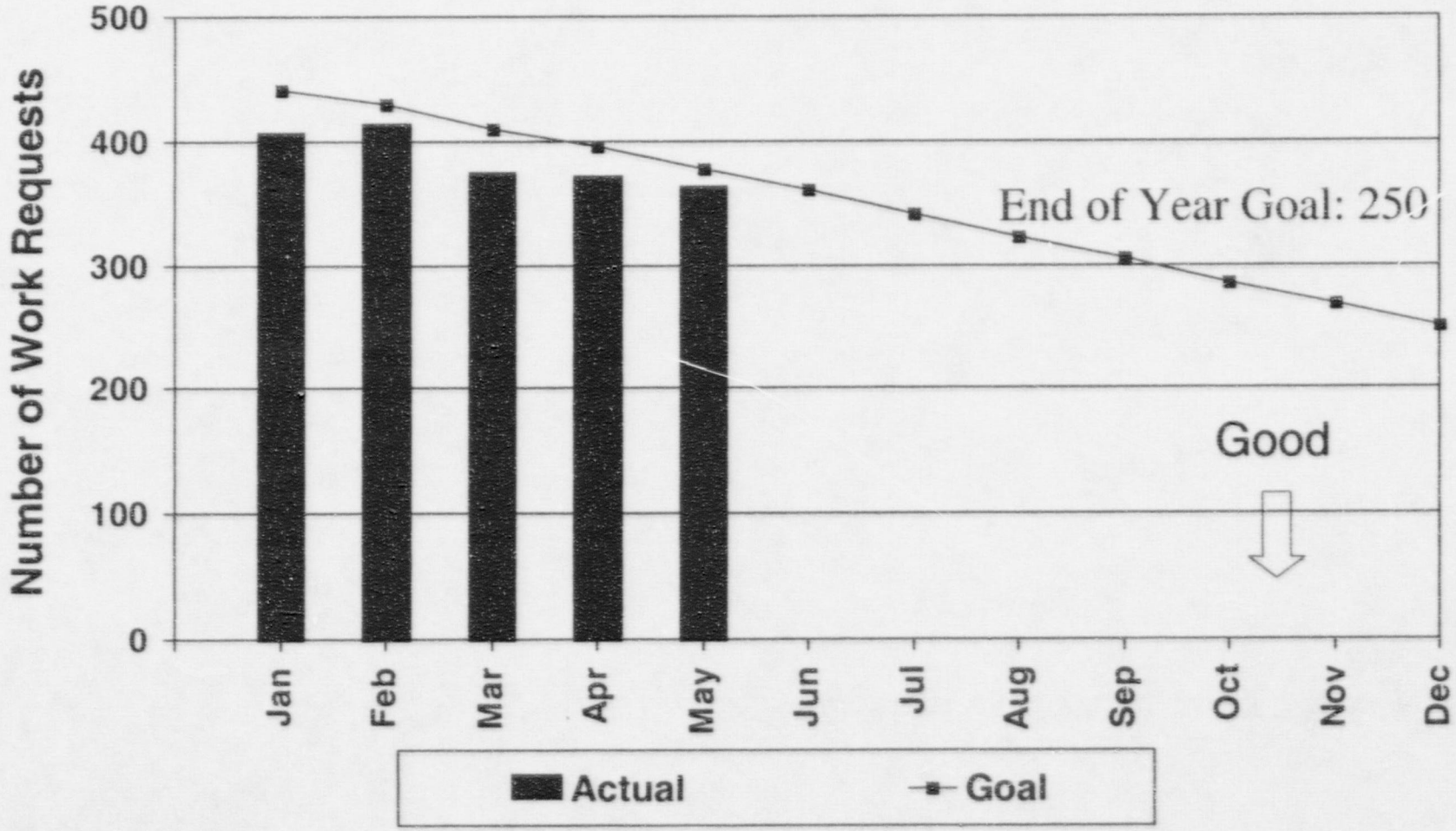
Non-Outage Corrective Maintenance Backlog



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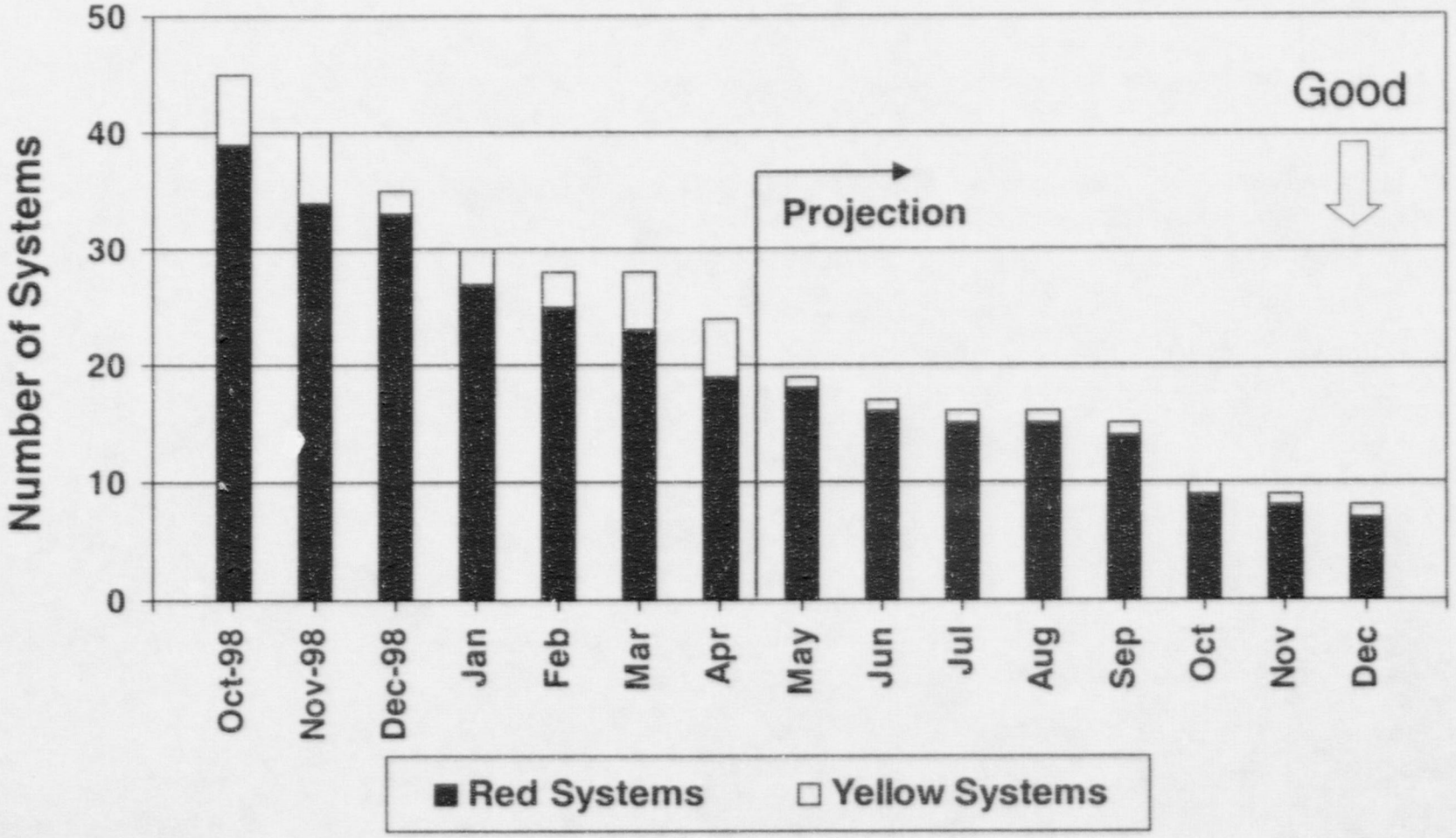
System Health Indicator Program



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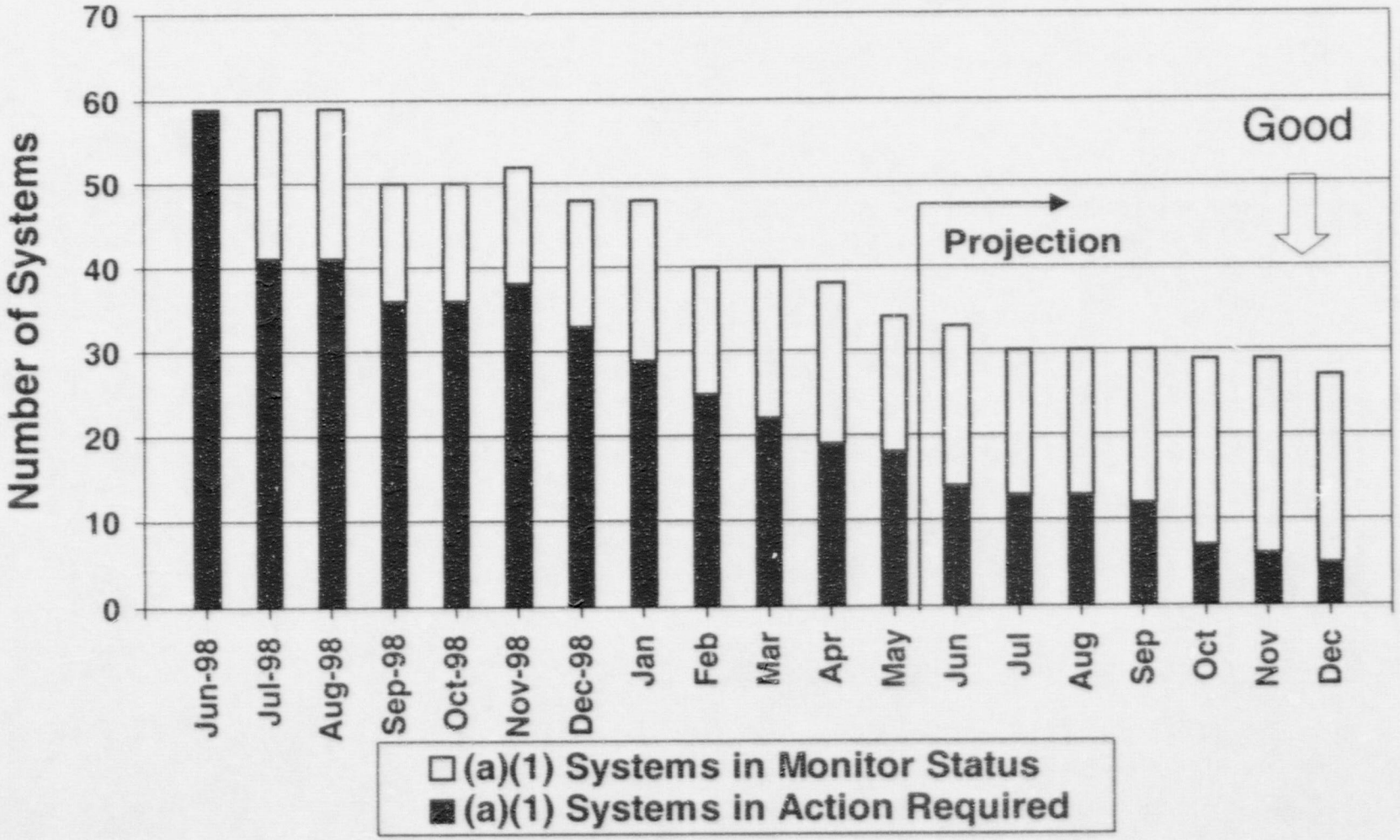
Maintenance Rule



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Material Condition Issues

Accomplishments

- Backlog Reduced
- Challenges to Operators Reduced
- Jet Pump Riser Repair
- Noble Metal Injection
- Radwaste Inputs Reduced

Priorities

- Electronic Components
  - Relays
  - Power Supplies
  - Other Equipment
- Redundant Off Gas Trains
- Scram-Derate-Challenge
- Appendix R
- OPEX Reviews
- Outage Preparations

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Material Condition Assessment

❒Poor **Fair** ⇧ Good Excellent

+ Corrective Maintenance Backlog Trending Down
+ 87.8 % Capacity Factor as of 5/31/99
- Maintenance Rule (a)(1) Systems
- Repetitive Equipment Failures
- OPEX and Scram Reduction Efforts

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Human Performance
High Impact Team

George Barnes

Station Manager

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Human Performance High Impact Team

- Charter
- Multi-Disciplined Team
- Results - Benchmarking and Tools
- Integrated Action Plan - June 11, 1999

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Operations

Bob Svaleson

Shift Operations Supervisor

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Operations

- Current Performance
  - Operations Configuration Control - Improving Trend
  - Out of Service Errors - Improving Trend
  - Ownership of Plant Material Condition
    - Annunciator Blackboard Achieved
    - Improving Trends:
      - Operator Workarounds
      - Caution Cards
  - Control of Critical Tasks / Evolutions
    - Startups/Shutdowns (Q2P02/Q1P02) - Error Free
    - Noble Metals Injection - Successful and Well Controlled
    - Logic Testing - No Issues

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Operations

- Focus Areas
  - Crew / Personnel Development
    - Formal Review Boards for Shift Management
    - Performance Evaluation of all Shift Personnel
    - Performance Feedback Yielding Positive Results
  - Adherence to Standards
    - Shift Manager/Supervisors More Intrusive
    - Shift Manager Field Walkdowns with FS and NLOs
    - Unit Supervisor Board Walkdown with NSOs
    - Gap Analysis of Fundamentals

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Maintenance/Work Control

Russ Freeman

Maintenance Manager

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Maintenance/Work Control

- Current Performance
  - Backlogs - Reduced
  - PM Program - Expansion
  - Maintenance Preventable Functional Failures - Decreasing
- Focus Areas
  - Rework
  - Human Performance
  - Work Control

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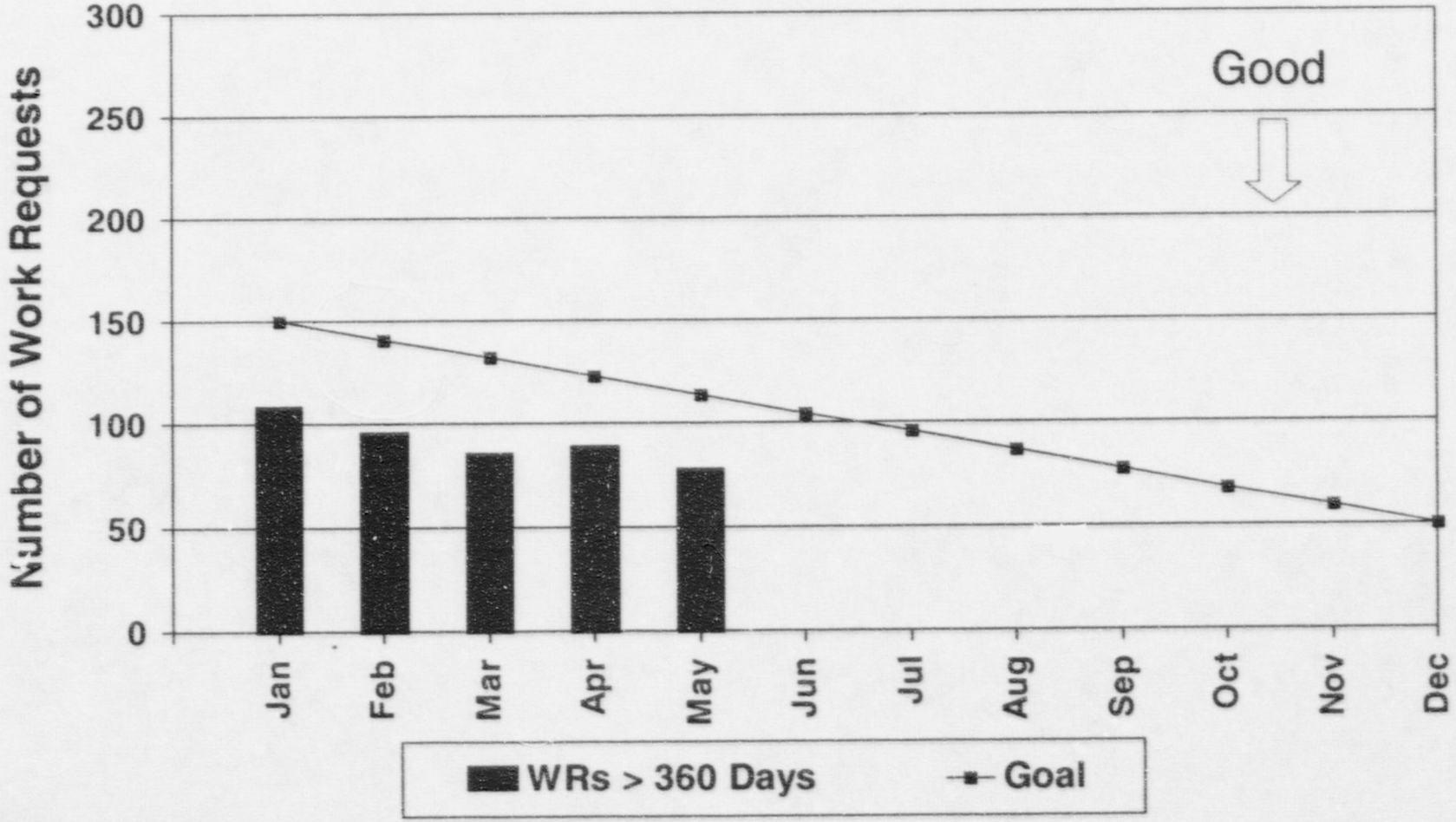
Non-Outage Corrective Backlog Greater Then 1 Year Old



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Maintenance/Work Control

- Focus Areas
  - Rework/Maintenance Self-Assessment 3/99
    - Analyze Every Occurrence
    - Personnel Accountability
    - Tailgate with Workforce
    - Specialized Mechanical Training
    - Work Analyst Training

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Maintenance/Work Control

- Focus Areas
  - Human Performance
    - Wrong Work Package (IM)/Test Equipment (EM)
    - What's Changed
      - Pre-job Briefs - Every Task
      - Work Execution Center Interactions - Challenge the Technicians
      - Human Performance HIT Team - Maintenance is Engaged
  - Work Control
    - Walkdowns
    - Job Duration Estimates
    - Multi-task Management Skills

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Engineering

Dave Wozniak

Site Engineering Manager

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Engineering

- Current Performance
  - Engineering Quality - Improving
  - Engineering Backlogs - Trending Down
  - Engineering Programs - Enhancements
- Focus Areas
  - OPEX Reviews
  - Appendix R Program
  - Troubleshooting Enhancements
  - Integration of Preventive Maintenance Program

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Plant Support

Ellen Anderson

Radiation Protection Manager

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Plant Support

❒ Current Performance

- ❖ Chemistry
  - Reactor Water Chemistry Remains Excellent
    CPI of 1.00 For Both Units
- ❖ Emergency Preparedness
  - Monthly Table Top Drills
  - FEMA ARCA Resolved
- ❖ Security
  - Program is Sound and Performance in All Areas is Good
  - Some Opportunities For Improvement
- ❖ Radiation Protection
  - Challenging Year-End Goal - 185 REM
  - Current Station Dose 121 REM - 3.6 REM Over Projection

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Plant Support

- Focus Areas
  - RP - Plans Developed to Achieve Dose Goal
    - Detailed ALARA Plans In Place
    - Engaging the Workforce
    - Source Term Reduction
    - PCE Reduction: 1997-714; 1998-510; 1999-29

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Nuclear Oversight

Ron Chrzanowski

Nuclear Oversight Assessment Manager

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Assessment Program

- Current Performance
  - Control Room Business Flow - Improving
  - Live Time Planning - Meeting Goals
  - Personnel Contamination Events - Significantly Reduced
- Focus Areas
  - Work Management
  - Material Condition
  - Human Performance
  - Self Assessments
  - Administrative Procedure Adherence

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Corrective Action Program

- Current Performance
  - Management Involvement - Increased
    (ESC, CARB, PORC, and Daily Review of Plant Issues)
  - Feedback to Station Management - Improved
  - Corrective Action Review - Quality Improved
- Focus Areas
  - Quality of Root Causes/ACEs/PIFs
  - Line Ownership of CAP
  - Action Tracking Management
  - Problem Identification

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Closing Remarks

Joel Dimmette

Site Vice President